BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents *will not* correct images, please do not report the images to the Image Problem Mailbox.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/448,088	11/23/1999	EDWARD A. RICHLEY	D/98588	4649

25453 7590 02/12/2004

PATENT DOCUMENTATION CENTER
XEROX CORPORATION
100 CLINTON AVE., SOUTH, XEROX SQUARE, 20TH FLOOR
ROCHESTER, NY 14644

EXAMINER	
LE, UYEN CHAU N	
ART UNIT	**PAPER NUMBER**
2876	

DATE MAILED: 02/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/448,088	RICHLEY ET AL.	
	Examiner	Art Unit	
	Uyen-Chau N. Le	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 November 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Prelim. Amdt/Amendment

1. Receipt is acknowledged of the Amendment and Terminal Disclaimer filed 26 November 2003.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 3, 4 and 9 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Bowers et al (US 5,963,134) in view of Schleipen (US 6,278,538).

Re claims 1, 3, 4 and 9: Bowers et al discloses a system 10 for identification and tracking of tags 54 distributed in a room. The system comprising a base station 42 for scanning beam; a

tag 54 reactive to incident beams; and a tag tracking system 52 receiving input from the base station 42; the tag tracking system 52 storing state records of position and information content of the tag 54; wherein the tag 54 is passive (figs. 1-4; col. 7, line 8 through col. 10, line 64).

Bowers et al fails to teach or fairly suggest that the base station is a laser base station and that the tag tracking system determines angular position of the tag with respect to the laser base station and comprising at least two laser base stations wherein the tag tracking system determines absolute position of the tag.

Schleipen teaches an angular position Po (θ_{PO} , ϕ_{PO}) is determined by a laser base station [46, 48] and a detector 49 (figs. 4A-B; col. 4, line 52 through col. 5, line 31).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Schleipen into the teachings of Bowers et al in order to provide Bowers et al with a more accurate system, wherein the laser beam would provide the system with a more accurate result and the exact location/position of an object can be established by determining its angular position. Furthermore, such modification would provide Bowers with a more versatile system wherein the system can use radio frequency and/or laser beams. Moreover, such modification would have Bowers et al with a more time consumption system wherein the exact location of an object/item can be located readily within a large scanning zone. Accordingly, such modification would have been a mere duplication of elements (i.e., two laser base stations) as taught by Bowers et al to provide a more accurate position/location of the detected object/item, and therefore an obvious expedient.

5. Claims 5-8 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowers et al as modified by Schleipen as applied to claim 1 above, and further in view of Moran

et al (US 6,005,482). The teachings of Bowers et al as modified by Schleipen have been discussed above.

Re claims 5-8 and 10-13, Bowers et al/Schleipen have been discussed above but fails to expressly disclose or fairly suggest that the tag is active, having an internal power supply to power a data broadcast element; an optical data output element; a radio data output element; an acoustic data output element.

Moran et al teaches the above limitation radio tags 110, infrared tags 116, acoustic tags 122 (figs. 2 & 3; col. 8, line 16 through col. 9, line 9).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Moran et al into the teachings of Bowers et al/Schleipen in order to provide the user with the flexibility to retrieve the output data in various of forms (i.e., optical form, radio form, or acoustic form, etc.), and thus providing a more user-friendly system. Furthermore, such modification would have been an obvious extension as taught by Bowers et al/Schleipen, well within ordinary skill in the art, and therefore an obvious expedient.

Response to Arguments

6. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

7. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the primary reference to Bowers et al discloses an interrogating system 120 comprising a scanning base station 42 for scanning through a portion [126_1, 126_2] of a room/shelf 124; a tag is detected within a predefined scanning zone [126_1, 126_2] (fig. 9; col. 15, lines 59+) and transmits data to a computer 122 (i.e., given the broadest reasonable interpretation, a predefined scanning zone is the location of a detected tag). However, Bowers et al is silent with respect to an angular position of the detected tag and the scanning base station is a laser base station. The secondary reference to Schleipen teaches an exact/angular position of a detected tag/object can be determined readily based on angles of scanning beams within a scanning zone between the two scanning base stations and the detected tag/object (fig. 4a; col. 4, lines 58+). Bowers et al locates an object within a scanning zone, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Schleipen into the system of Bowers et al to determine the exact position of the object with respect to the angles between the object and the scanner(s)/reading base station(s), and thus provide the user the ability to find the object readily without going through all of the objects located within the scanning zone. Accordingly, the claimed limitation, given the

broadest reasonable interpretation, Bowers et al in view of Schleipen meets the claimed invention (see the rejection above).

For the reasons stated above, the Examiner believes that a proper prima-facie case of obviousness has been established. Therefore, the Examiner has made this Office Action final.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uyen-Chau N. Le whose telephone number is 571-272-2397. The examiner can normally be reached on SUN, M, W, F 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL G LEE can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Uyen-Chau N. Le
January 30, 2004

MICHAEL G. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800